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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/504,395	02/24/2005	Kevin Ronald McWilliams	CES-72	3613
7590	02/28/2006			
Ira S Dorman Suite 200 330 Roberts Street East Hartford, CT 06108			EXAMINER PAIK, SANG YEOP	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/504,395

Applicant(s)

MCWILLIAMS, KEVIN RONALD

Examiner

Sang Y. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 11, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schilling et al (US 5,396,047).

Schilling shows an electric heater assembly comprising a first heating zone (4), a second heating zone (5), each with a heating element with its respective first cyclic energy controller relay (24) and a second cyclic energy controller relay (23), the first cyclic energy controller is controlling the power of the first heating element at a predetermined setting between a maximum and minimum duty cycle/wave, and at the selected full power, the second cyclic energy controller energizes the second heating element at a substantially maximum duty cycle with the first cyclic energy controller to energize the first heating element less than the maximum duty cycle providing less than maximum power in the first heating zone. Schilling further teaches that a predetermined fixed or varying ratio of the duty cycle/wave is set between the first and second cyclic energy controller in a temperature-dependent manner which determines a high and a low power setting. Also see column 7, lines 5-66.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al (US 5,496,047).

Schilling shows the assembly claimed except the claimed varying ratio to meet the claimed power setting.

Schilling teaches that the heating elements are controlled so that in order to reach a set temperature, the electric power is supplied is regulated down and up to meet the desired temperature (see column 6, lines 57-69). Schilling further teaches that the set ratio of the cycle/wave provides the power range of the heating unit. Thus, it would have been obvious to one of ordinary skill in the art to vary the ratio of the cycle from an initial setting to any desired duty cycle settings to obtain the desired heating temperature since the fixed or varying ratio would be determine active of the power settings.

With respect to claim 10, while Schilling does not show the second heating element energized with 100 percent duty cycle while the first heating element at 80% duty cycle, Schilling teaches that it is desirable provide a more duty cycle to a cooler region than a hot region to generate a desired uniform heating distribution across its heating surface. Thus, it would have been obvious to one of ordinary skill in the art to provide the heating elements with the claimed duty cycle arrangement or any other arrangement in order to provide a uniform heat transfer to cooking vessels or pans.

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al (US 5,496,047) in view of Well, Jr et al (US 4,786,799).

Schilling shows the assembly claimed except the microprocessor-based control system.

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Well shows a microprocessor-based control system to control the cyclic energy controllers such as the triacs/relays. Well further shows a manual input selection means to manually and selectively control the heating system.

In view of Well, it would have been obvious to one of ordinary skill in the art to adapt Schilling with the microprocessor with the manual input means to selectively control the power input of the individual heating elements.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al (US 5,496,047) in view of McWilliams (US 4,393,299) or Gossler (US 4,347,432).

Schilling shows the assembly claimed except the thermal insulation wall.

McWilliams or Gossler shows that it is well known in the art to provide a thermal insulation wall between individual heating zones. In view of McWilliams or Gossler, it would have been obvious to one of ordinary skill in the art to adapt Schilling with a thermal insulation wall to divide heating zones to better control its respective heating surfaces with a more accurate heating temperature.

Response to Arguments

7. Applicant's arguments filed 1/30/06 have been fully considered but they are not persuasive.

The applicant argues that since the two heating elements are energized simultaneously at full duty cycle, or sequentially where only one is energized at any time, the heating elements cannot be equated to operating them together. This argument is not deemed since when the heating elements are energized simultaneously or sequentially, they are working together to achieve the desired heating conditions.

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Schilling shows an example wherein the first heating zone is operable along with the first cyclic energy controller wherein eight cycles are supplied to the first heating element and twelve cycles, which are substantially maximum duty cycles, are supplied to the second heating element. It is also noted that the first heating element is operable alone with the first cyclic energy controller (24) and not with the second cyclic energy controller. Schilling further teaches that the ratio of the cyclic waves can be varied as well to meet the desired heating conditions.

Furthermore, it is noted that the claims recite for the maximum/minimum duty cycle and not with respect to the full duty cycle.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y. Paik whose telephone number is 571-272-4783. The examiner can normally be reached on M-F (9:00-4:00) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S-R

Sang Y Paik
Primary Examiner
Art Unit 3742

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